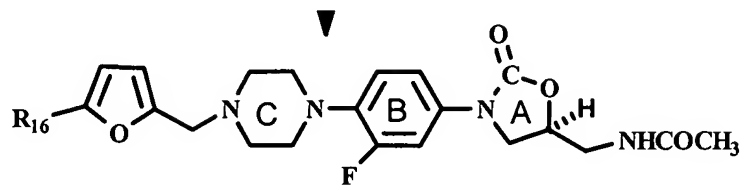




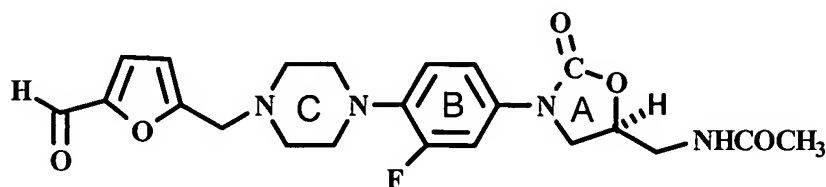
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*Mehta et al.*  
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1. Cancelled.
  2. Cancelled.
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  11. Cancelled.
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  15. Cancelled.
  16. (Original) A process for preparing a compound of Formula XI

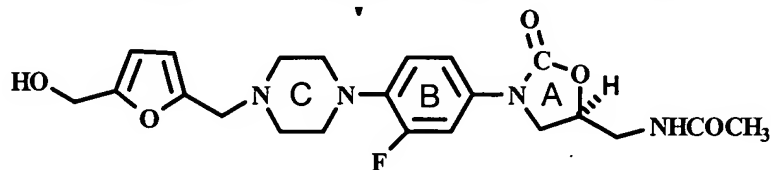


(R<sub>16</sub> = -CH<sub>2</sub>F or -CH<sub>2</sub>F<sub>2</sub>) by reacting a compound of Formula IX



FORMULA IX

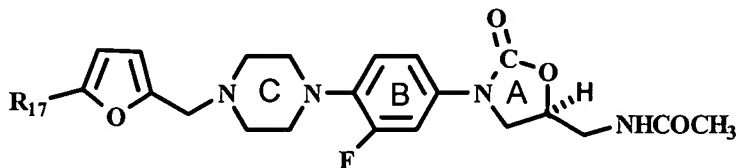
with sodium borohydride to produce a compound of Formula X



FORMULA X

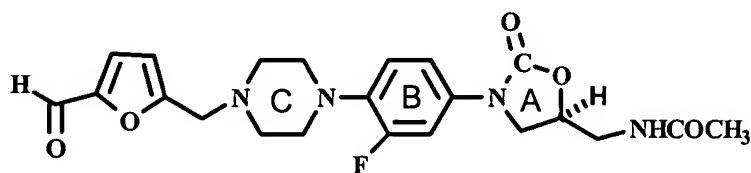
and further reacting this compound with diethylamino sulfurtrifluoride to produce compound of Formula XI.

17. (Original) A process for preparing a compound of Formula XII



FORMULA XII

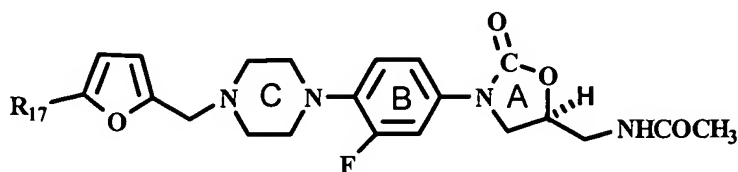
wherein R<sub>17</sub> =  $\text{CH}_2\text{N}=\text{N}-\text{OH}$  which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX



FORMULA IX

with hydroxylamine.

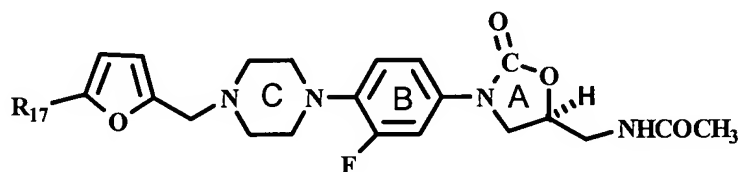
18. (Original) A process for preparing a compound of Formula XII



FORMULA XII

wherein  $R_{17} = \text{CH=CH-NH}_2$  which comprises reacting (S)-N-[[3-[3-Fluoro-4[N-1-[4-{2-furyl-(5-hydrazone)-methyl}]]-piperazinyl]-phenyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide with hydrazine hydrate.

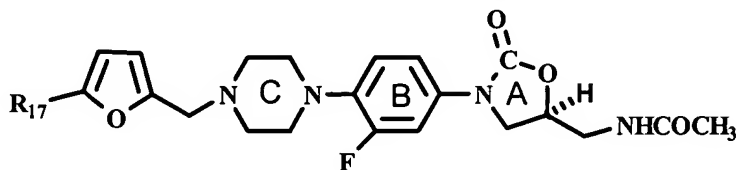
19. (Original) A process for preparing a compound of Formula XII



FORMULA XII

wherein  $R_{17} = \text{CH=CH-N-O-C(=O)-NH-C}_6\text{H}_4\text{-CH}_2\text{COOCH}_3$  which comprises reacting (S)-N-[[3-[3-Fluoro-4-[N-1-[4-(2-furyl-(5-aldoxime)methyl]] piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide with isocyanate.

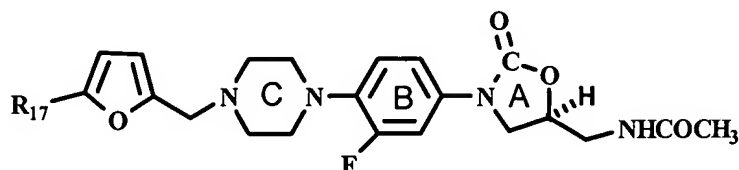
20. (Original) A process for preparing a compound of Formula XII




FORMULA XII

wherein  $R_{17} = \text{CN}$  which comprises reacting (S)-N-[[3-[3-Fluoro-4-[N-1[4-(2-furyl(5-cyano)methyl]]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide with triflic anhydride and triethylamine.

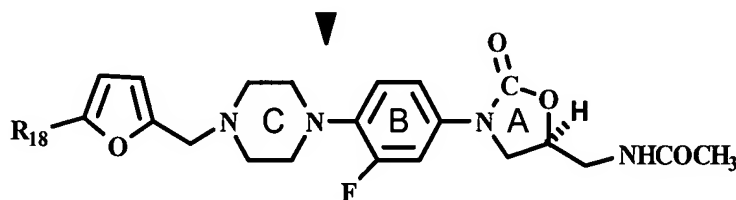
21. (Original) A process for preparing a compound of Formula XII



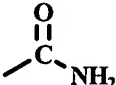
FORMULA XII

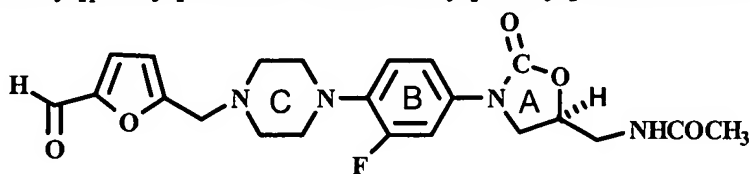
wherein R17 =  which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[5-(1,3-dioxane)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide with 1,3-propane diol and BF<sub>3</sub> etherate.

22. (Original) A process for the preparation of the compound of Formula XIV



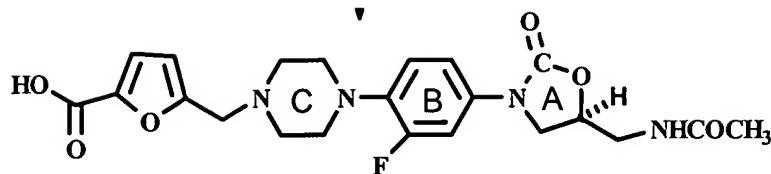
FORMULA XIV

wherein R<sub>18</sub> =  which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX



FORMULA IX

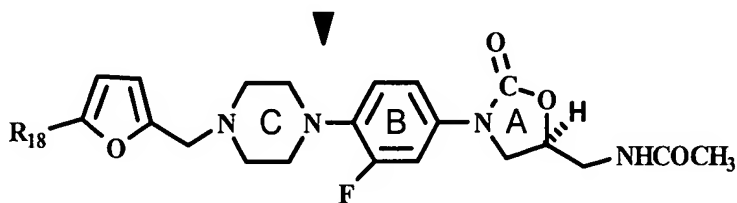
with Ag<sub>2</sub>O to produce (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII followed by reacting (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl- (5-carboxyethyl)methyl)piperazinyl]phenyl]- 2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII



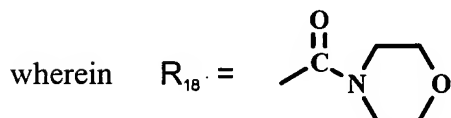
FORMULA XIII

with aqueous ammonia to produce Formula XIV.

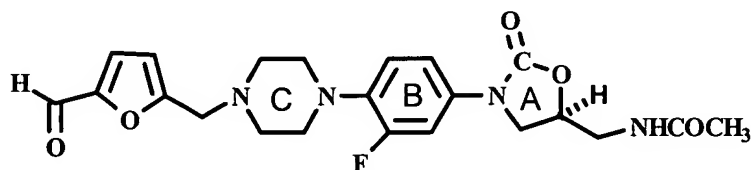
23. (Original) A process for the preparation of the compound of Formula XIV



FORMULA XIV

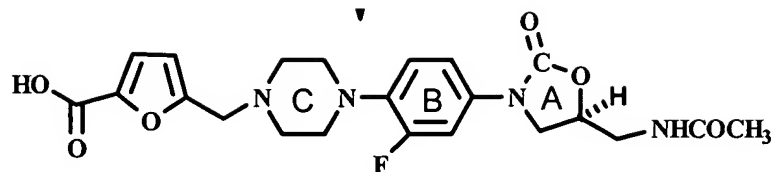


which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX



FORMULA IX

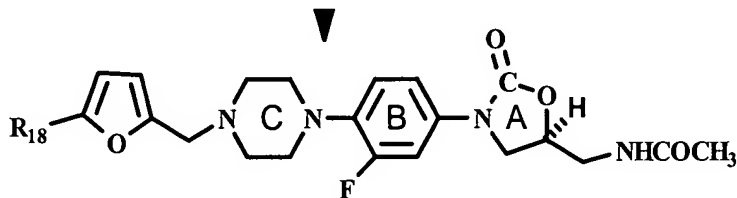
with  $Ag_2O$  to produce (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII followed by reacting (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl(5-carboxyethyl)methyl)piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII



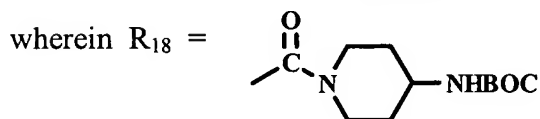
FORMULA XIII

with thionyl chloride to produce Formula XIV.

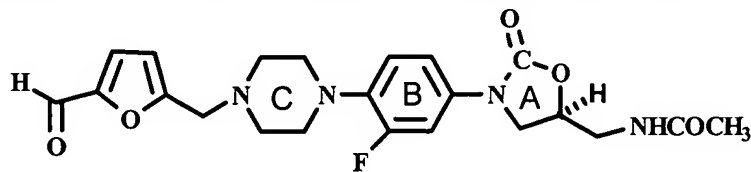
24. (Original) A process for the preparation of the compound of Formula XIV



FORMULA XIV

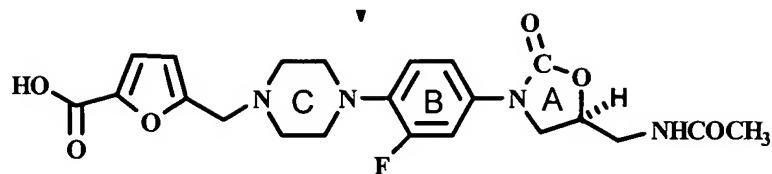


which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}] piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX



FORMULA IX

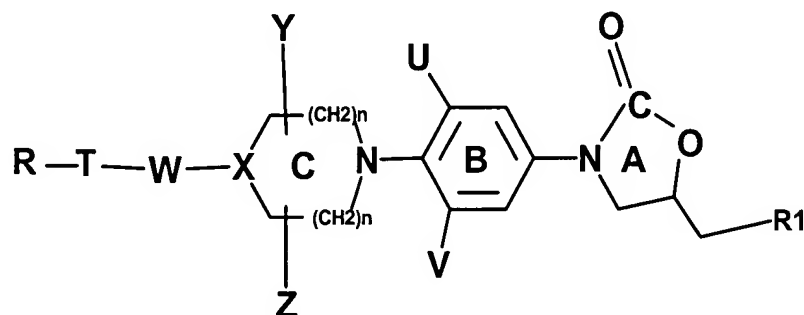
with  $Ag_2O$  to produce (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}] piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII followed by reacting (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl(5-carboxyethyl)methyl)piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII



FORMULA XIII

with morpholine in the presence of oxalyl chloride to produce Formula XIV.

25. (New) A compound having the structure of Formula I



FORMULA I

and its pharmaceutically acceptable salts, enantiomers, diastereomers, or N-oxides, wherein

**T** is five- to seven-membered heterocyclic ring, aryl, substituted aryl, bound to the ring **C** with a linker **W** and the heterocyclic and aryl rings are further substituted by a group represented by **R**,

wherein **R** is selected from the group consisting of alkyl (C<sub>1-6</sub>), halogen-CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>, R<sub>7</sub>), CON (R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH = N-OR<sub>10</sub>, -C=CH-R<sub>5</sub>, wherein R<sub>5</sub> is selected from the group consisting of H, optionally substituted C<sub>1</sub>-C<sub>12</sub>, alkyl, C<sub>3-12</sub>, cycloalkyl, aryl, heteroaryl; R<sub>6</sub> and R<sub>7</sub> are independently selected from the group consisting of H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy; R<sub>8</sub> and R<sub>9</sub> are independently selected from the group consisting of H, C<sub>1-6</sub> alkyl, F, Cl, Br, C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I, OR<sub>4</sub>, SR<sub>4</sub>, N(R<sub>6</sub>, R<sub>7</sub>) wherein R<sub>4</sub> is selected from the group consisting of H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub>

alkoxy, C<sub>1-6</sub> alkyl substituted with one or more F, Cl, Br, I or OH and R<sub>6</sub> and R<sub>7</sub> are the same as defined earlier, R<sub>10</sub> is selected from the group consisting of H, optionally substituted from H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-512</sub> cycloalkyl, C<sub>1-6</sub>, alkoxy, C<sub>1-6</sub> alkyl, aryl, heteroaryl;

n is 1;

X is N

Y and Z are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyl, and C<sub>3-12</sub> cycloalkyl;

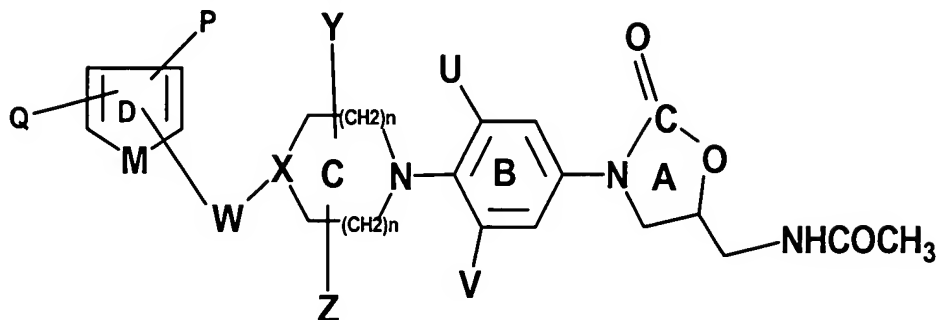
U and V are independently selected from the group consisting of hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, and C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I;

W is selected from the group CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N (R<sub>11</sub>) CH<sub>2</sub>-, -CO-CO-, CH<sub>2</sub> (R<sub>11</sub>) N -, CH (R<sub>11</sub>), S, CH<sub>2</sub>(CO), N (R<sub>11</sub>) wherein R<sub>11</sub> is hydrogen, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl or heteroaryl;

R<sub>1</sub> is selected from the group consisting of - NHC(=O)R<sub>2</sub> wherein R<sub>2</sub> is hydrogen, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl substituted with one or more of F, Cl, Br, I or OH; N(R<sub>3</sub>, R<sub>4</sub>); -NR<sub>2</sub>C(=S) R<sub>3</sub>; -NR<sub>2</sub>C(=S)SR<sub>3</sub> wherein R<sub>2</sub> is the same as defined above and R<sub>3</sub> and R<sub>4</sub> are independently selected from the group consisting of H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl substituted with one or more of F, Cl, Br, I or OH.



26. (New) A compound having structure of Formula II



FORMULA II

and its pharmaceutically acceptable salts, enantiomers, diastereomers, or N-oxides, wherein

M= O, S, NH, N-CH<sub>3</sub>;

X is N;

Y and Z are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyl, and C<sub>3-12</sub> cycloalkyl;

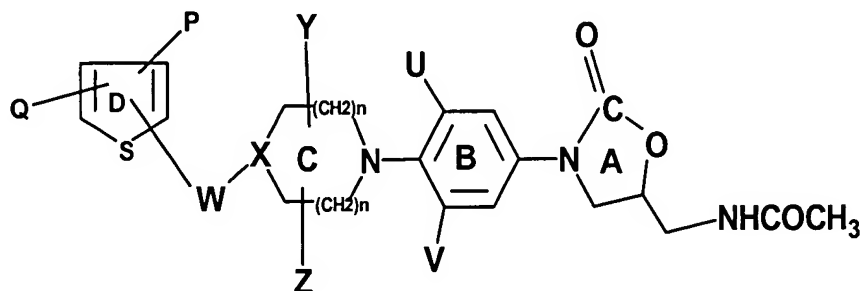
U and V are independently selected from the group consisting of hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, and C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I;

W is selected from the group consisting of CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N(R<sub>11</sub>)CH<sub>2</sub>-, CH<sub>2</sub>(R<sub>11</sub>)N-, CH(R<sub>11</sub>), S, CH<sub>2</sub>(CO), NH wherein R<sub>11</sub> is optionally substituted with C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl, heteroaryl except when M=S, Q=P=H, W=(C=O);

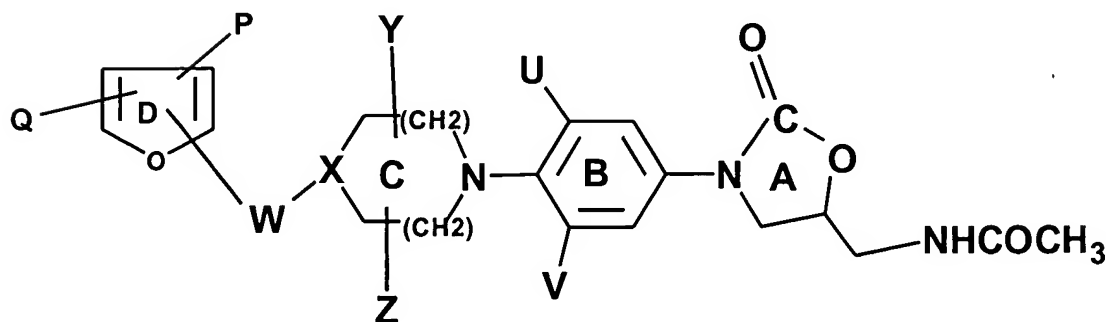
n is 1; and,

Q and P are independently selected from the group consisting of -CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>, R<sub>7</sub>), CON(R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH=N-OR<sub>10</sub>, C=CH-R<sub>5</sub>, wherein R<sub>5</sub> is selected from the group consisting of H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, aryl, heteroaryl; R<sub>6</sub> and R<sub>7</sub> are independently selected from the group consisting of H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy; R<sub>8</sub> and R<sub>9</sub>

are independently selected from the group consisting of H, C<sub>1-6</sub> alkyl, F, Cl, Br, C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I, OR<sub>4</sub>, SR<sub>4</sub>, wherein R<sub>4</sub> is selected from the group consisting of H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl substituted with one or more F, Cl, Br, I or OH, N(R<sub>6</sub>, R<sub>7</sub>), R<sub>10</sub> is selected from the group consisting of H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl, heteroaryl except W = (CO), Q and P = H and M = S, wherein M = Sulphur and Oxygen as shown by Formulae III and IV respectively,



FORMULA III



Formula IV

wherein P, Q, U, V, X, Y, Z, W and n in Formulae III and IV as defined earlier for Formula I.

27. (New) A compound selected from the group consisting of

1. (S)-N-[[3-[3-Fluoro-4-[N-1-[4-(2-furoyl) piperazinyl]]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
2. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide

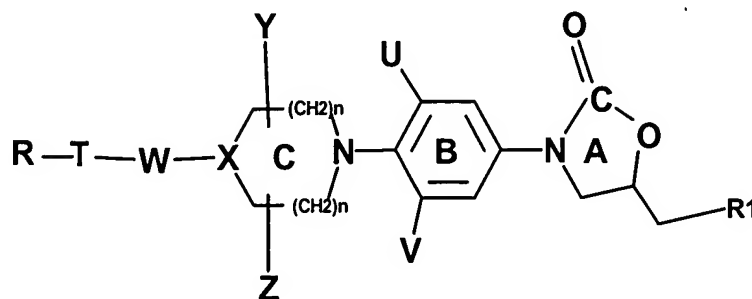
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3. (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl-(5-carboxyethyl)methyl)piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
  4. (S)-N-[[3-Fluoro-4-[N-1[4-(5-bromo-2-furoyl)]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl] methyl]acetamide
  5. (S)-N-[[3-Fluoro-4-[N-1[4-(5-chloromethyl-2-furoyl)piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
  6. (S)-N-[[3-Fluoro-4-[N-1[4-(5-nitro-2-furoyl)piperazinyl]phenyl]-2-oxo-5-oxazolidinyl] methyl]acetamide
  7. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-(2-thienyl)dicarbonyl}]]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
  8. (S)-N[[3-[3-Fluoro-4-[N-1[4-(3-furoyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl] acetamide
  9. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-bromo)methyl}]]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
  10. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(5-chloro)methyl}]]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
  11. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2-furylmethyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl] methyl]acetamide
  12. (S)-N-[[3-[3-Fluoro-4-[N-1[4-(2-thienylmethyl)]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
  13. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2-thienylacetyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl] methyl]acetamide
  14. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(4-bromo)methyl}]]piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
  15. (S)-N-[[3-[3-fluoro-4-[N-1-[4-{2-furyl(5-nitro)methyl}]]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide.
  16. Hydrochloric salt of (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-nitro)methyl}]]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
  17. Citrate salt of (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-nitro)methyl}]]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
  18. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2-pyrrolylmethyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide

19. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(3-methyl)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
20. (S)-N[[3-[3-Fluoro-4-[N-1[4-(3-furylmethyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
21. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(5-methyl)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
22. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-pyrrole(1-methyl)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
23. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(5-nitro)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
24. (S)-N[[3-[3-Fluoro-4-[N-1[4-[2-furyl{5-(N-thiomorpholinyl)methyl}methyl]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
25. (S)-N[[3-[3-Fluoro-4-[N-1[4-[2-furyl{5-(N-morpholinyl)methyl}methyl]]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
26. (S)-N[[3-Fluoro-4-[N-1[4-{2-furyl(5-acetoxymethyl)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl)methyl]acetamide
27. (S)-N[[3-Fluoro-4-[N-1[4-{2-thienyl(5-bromo)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl)methyl]acetamide
28. (S)-N[[3-Fluoro-4-[N-1[4-(5-nitro-2-furylmethyl)piperazinyl]phenyl]-2-oxo-oxazolidinyl)methyl]dichloroacetamide
29. (S)-N[[3-[3-Fluoro-4-[N-1[4-(5-nitro-2-thienoyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide hydrochloride
30. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2',2'-diphenyl-2'-hydroxy acetyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl)methyl]acetamide
59. (S)-N[[3-[3-fluoro-4-[N-1{2-furyl-[4-(5-difluoromethyl)methyl]piperazinyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide.
60. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2-furyl(5-aldoxime)methyl]]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl)methyl]acetamide
61. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-aldoxime(methyl-4-(N-carboxyaminophenyl acetate)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl)methyl]acetamide

62. (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-hydrazone)-methyl}]-piperazinyl]-phenyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide
63. (S)-N-[[3-[3-fluoro-4-[N-1{2-furyl-[4-(5-difluoromethyl) methyl}]piperazinyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide
64. (S)-N-[[3-[3-Fluoro-4-[N-1-[4-(2-furyl-(5-aldoxime)methyl}] piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
65. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-aldoxime(methyl-4-(N-carboxyaminophenyl acetate) methyl}] piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
66. (S)-N-[[3-[3-Fluoro-4[N-1-[4-{2-furyl-(5-hydrazone)-methyl}]-piperazinyl]-phenyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide
67. (S)-N-[[3-[3-Fluoro-4-[N-1{2-furyl-[4-(5-hydroxymethyl)methyl}] piperazinyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
68. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-cyano)methyl}] piperazinyl]phenyl] -2-oxo-5-oxazolidinyl]methyl]acetamide
69. (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
70. (S)-N-[[3-Fluoro-4-[N-1[5-(1,3-dioxane)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
71. (S)-N-[[3-Fluoro-4-[N-1[5-(formamido)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
72. (S)-N-[[3-Fluoro-4-[N-1[5-(morpholine-1-carbonyl)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
73. (S)-N-[[3-Fluoro-4-[N-1[5-(4-(tert butoxy carbonyl)amino piperidine)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
74. (S)-N-[[3-Fluoro-4-[N-1[4-{(Z)-2-methoxyimino-2-(2-furyl)acetyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
28. (New) A pharmaceutical composition comprising the compound of claims 25, 26, or 27 and a pharmaceutically acceptable carrier.
29. (New) A pharmaceutical composition comprising a pharmaceutically effective amount of compound according to claims 25, 26 or 27, or a physiologically acceptable acid addition salt thereof with a pharmaceutically acceptable carrier for treating microbial infections.

30. (New ) A method of treating or preventing microbial infections in a mammal comprising administering to the said mammal, the pharmaceutical composition according to claim 29.

31. (New ) A process for preparing a compound of Formula I



FORMULA I

and its pharmaceutically acceptable salts, enantiomers, diastereomers, or N-oxides, wherein

**T** is five to seven membered heterocyclic ring, aryl, substituted aryl, bound to the ring **C** with a linker **w** and the heterocyclic and aryl rings are further substituted by a group represented by **R**,

wherein **R** is selected from the group consisting of  $-\text{CN}$ ,  $\text{COR}_5$ ,  $\text{COOR}_5$ ,  $\text{N}(\text{R}_6, \text{R}_7)$ ,  $\text{CON}(\text{R}_6, \text{R}_7)$ ,  $\text{CH}_2\text{NO}_2$ ,  $\text{NO}_2$ ,  $\text{CH}_2\text{R}_8$ ,  $\text{CHR}_9$ ,  $-\text{CH}=\text{N}-\text{OR}_{10}$ ,  $-\text{C}=\text{CH}-\text{R}_5$ , wherein  $\text{R}_5$  is selected from the group consisting of H, optionally substituted  $\text{C}_1\text{-C}_{12}$ , alkyl,  $\text{C}_{3-12}$ , cycloalkyl, aryl, heteroaryl,  $\text{R}_6$  and  $\text{R}_7$ , are independently selected from the group consisting of H, optionally substituted  $\text{C}_{1-12}$  alkyl,  $\text{C}_{3-12}$  cycloalkyl,  $\text{C}_{1-6}$  alkoxy;  $\text{R}_8$  and  $\text{R}_9$  are independently selected from the group consisting of H,  $\text{C}_{1-6}$  alkyl, F, Cl, Br,  $\text{C}_{1-12}$  alkyl substituted with one or more of F, Cl, Br, I,  $\text{OR}_4$ ,  $\text{SR}_4$ ,  $\text{N}(\text{R}_6, \text{R}_7)$  wherein  $\text{R}_4$  is selected from the group consisting of H,  $\text{C}_{1-12}$  alkyl,  $\text{C}_{3-12}$  cycloalkyl,  $\text{C}_{1-6}$  alkoxy,  $\text{C}_{1-6}$  alkyl substituted with one or more F, Cl, Br, I or OH and  $\text{R}_6$  and  $\text{R}_7$  are the same as defined earlier,  $\text{R}_{10}$  is selected from the group consisting of H, optionally substituted from H, optionally substituted  $\text{C}_{1-12}$  alkyl,  $\text{C}_{3-512}$  cycloalkyl,  $\text{C}_{1-6}$ , alkoxy,  $\text{C}_{1-6}$  alkyl, aryl, heteroaryl;

**n** is 1;

**X** is N;

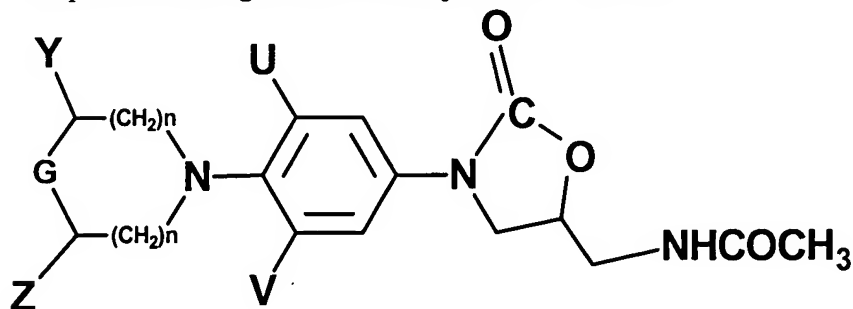
**Y and Z** are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyl, and C<sub>3-12</sub> cycloalkyl;

**U and V** are independently selected from the group consisting of hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, and C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I;

**W** is selected from the group consisting of CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N(R<sub>11</sub>)CH<sub>2</sub>-, CH<sub>2</sub>(R<sub>11</sub>)N-, CH(R<sub>11</sub>), S, CH<sub>2</sub>(CO), NH wherein R<sub>11</sub> is optionally substituted with C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl, heteroaryl; and

**R<sub>1</sub>** is selected from the group consisting of -NHC(=O)R<sub>2</sub> wherein R<sub>2</sub> is hydrogen, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl substituted with one or more of F, Cl, Br, I or OH; N(R<sub>3</sub>, R<sub>4</sub>); -NR<sub>2</sub>C(=S)R<sub>3</sub>; -NR<sub>2</sub>C(=S)SR<sub>3</sub> wherein R<sub>2</sub> is the same as defined above and R<sub>3</sub> and R<sub>4</sub> are independently selected from the group consisting of H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl substituted with one or more of F, Cl, Br, I or OH,

which comprises reacting an amine compound of Formula V



FORMULA V

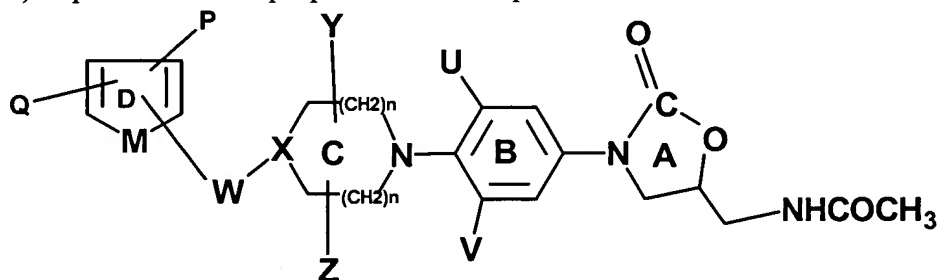
with a heterocyclic compound of Formula R-T-W- R<sub>12</sub> wherein G in amines of

Formula V is defined as NH and Y, Z, U, V, R<sub>1</sub>, n, R, T and W are the same as defined earlier and R<sub>12</sub> is a leaving group selected from the group consisting of fluoro, chloro, bromo, SCH<sub>3</sub>, -SO<sub>2</sub>CH<sub>3</sub>, -SO<sub>2</sub>CF<sub>3</sub> or OC<sub>6</sub>H<sub>5</sub>.

32. (New) A process for preparing a compound of Formula I as claimed in claim 31, wherein W=CH<sub>2</sub> and R-T-W-R<sub>12</sub> is a five membered heterocyclic ring with aldehyde group and the compound of Formula I is produced by reductive amination.

33. (New) A process for preparing a compound of Formula I as claimed in claim 31, wherein W = CO and R-T-W-R<sub>12</sub> is a five membered heterocyclic ring with carboxylic acid, and amino compound of Formula V is acylated with activated esters in presence of condensing agents comprising 1,3-dicyclohexylcarbodiimide (DCC) and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide (EDC).

34. (New) A process for the preparation of compound of Formula II



FORMULA II

wherein

n is 1;

X is N;

Y and Z are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyl, and C<sub>3-12</sub> cycloalkyl;

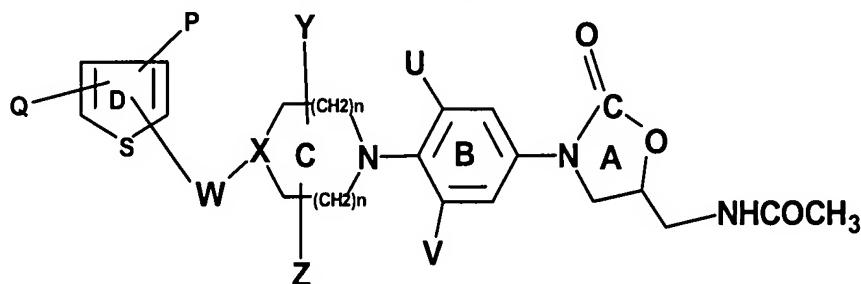
U and V are independently selected from the group consisting of hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, and C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I;



W is selected from the group consisting of CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N(R<sub>11</sub>)CH<sub>2</sub>-, CH<sub>2</sub>(R<sub>11</sub>)N-, CH(R<sub>11</sub>), S, CH<sub>2</sub>(CO), NH wherein R<sub>11</sub> is optionally substituted with C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl, heteroaryl; and

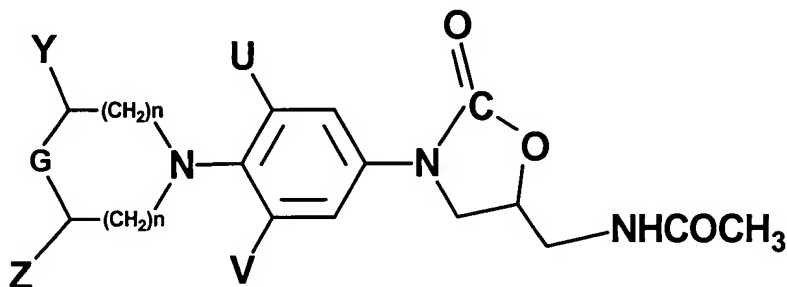
Q and P are independently selected from the group consisting of -CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>, R<sub>7</sub>), CON(R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH=N-OR<sub>10</sub>, C=CH-R<sub>5</sub>, wherein R<sub>5</sub> is selected from the group consisting of H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, aryl, heteroaryl; R<sub>6</sub> and R<sub>7</sub> are independently selected from the group consisting of H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy; R<sub>8</sub> and R<sub>9</sub> are independently selected from the group consisting of H, C<sub>1-6</sub> alkyl, F, Cl, Br, C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I, OR<sub>4</sub>, SR<sub>4</sub>, wherein R<sub>4</sub> is the same as defined before, N(R<sub>6</sub>, R<sub>7</sub>), R<sub>10</sub> is selected from the group consisting of H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl, heteroaryl except W=(CO), Q and P =H.

wherein M = Sulphur is shown by compounds of Formula III,



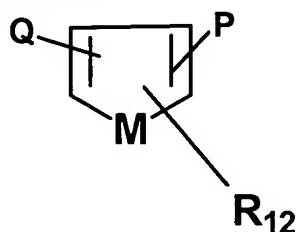
FORMULA III

wherein **P, Q, U, V, X, Y, Z, W** and **n** in Formula III are the same as previously defined,  
 wherein the process comprising reacting a compound of Formula V



FORMULA V

with a compound of Formula VI



FORMULA VI

wherein **P, Q, R<sub>12</sub>, Y, Z, G, n, U** and **V** are the same as defined earlier.

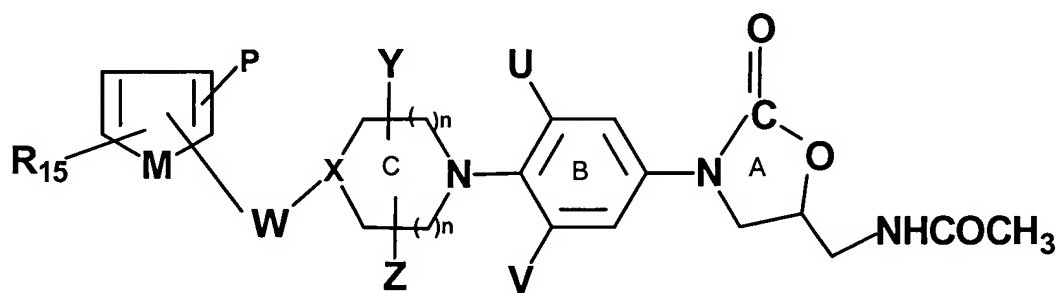
35. (New) A process for preparing a compound of Formula II as claimed in claim 34, in a solvent selected from the group consisting of dimethylformamide, dimethylacetamide, ethanol or ethylene glycol at a temperature in the range of -70°C to 180°C in the presence of a base selected from the group consisting of triethyl amine, diisopropyl amine, potassium carbonate and sodium bicarbonate.

36. (New) A process of preparing a compound of Formula II as claimed in claim 34, wherein Formula VI is furaldehyde and reductive alkylation of the amine of Formula V is performed with a reducing agent.

37. (New) A process for preparing a compound of Formula II as claimed in claim 34, wherein Formula VI is furoic acid.

38. (New) A process for preparing a compound of Formula II as claimed in claim 34, wherein the compounds of Formula II having carbonyl link are prepared by reacting a heteroaromatic compound of the Formula VI including N- methyl pyrrole with the intermediate amine of Formula V in the presence of triphosgene or phosgene and carbonyl linkers are introduced between heteroaromatic compound comprising reacting 3- bromothiophene and amine of Formula V with carbon monoxide and the catalyst is selected from the group consisting of Pd (PPh<sub>3</sub>)<sub>2</sub>Cl<sub>2</sub> and extended chain pyrroles having dicarbonyl linkers are obtained by treatment of oxalyl chloride and amine of the Formula V.

39. (New) A process for preparing a compound of Formula VIII



FORMULA VIII

wherein

**n** is 1;

**X** is N;

**Y and Z** are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyl, and C<sub>3-12</sub> cycloalkyl;

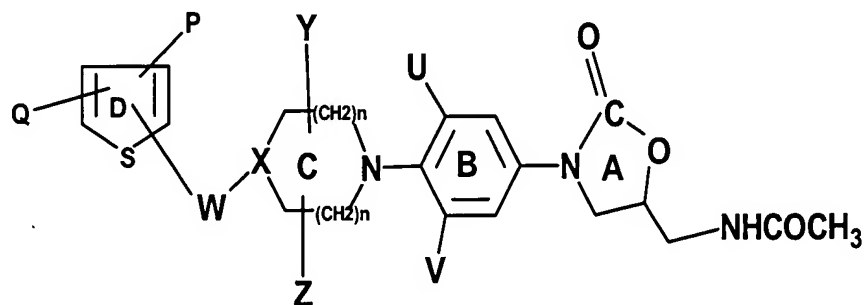
**U and V** are independently selected from the group consisting of hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, and C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I;

**W** is selected from the group consisting of CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N (R<sub>11</sub>) CH<sub>2</sub> -, CH<sub>2</sub> ( R<sub>11</sub>) N-, CH ( R<sub>11</sub>), S, CH<sub>2</sub>( CO), NH wherein R<sub>11</sub> is

optionally substituted with  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$  alkoxy,  $C_{1-6}$  alkyl, aryl, heteroaryl;

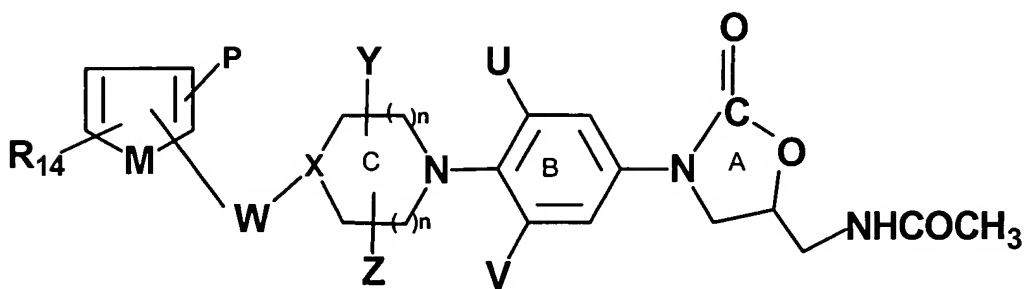
**Q and P** are independently selected from the group consisting of -CN,  $COR_5$ ,  $COOR_5$ , N( $R_6$ ,  $R_7$ ),  $CON(R_6, R_7)$ ,  $CH_2NO_2$ ,  $NO_2$ ,  $CH_2R_8$ ,  $CHR_9$ ,  $-CH=N-OR_{10}$ ,  $C=CH-R_5$ , wherein  $R_5$  is selected from the group consisting of H, optionally substituted  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl, aryl, heteroaryl;  $R_6$  and  $R_7$  are independently selected from the group consisting of H, optionally substituted  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$  alkoxy;  $R_8$  and  $R_9$  are independently selected from the group consisting of H,  $C_{1-6}$  alkyl, F, Cl, Br,  $C_{1-12}$  alkyl substituted with one or more of F, Cl, Br, I,  $OR_4$ ,  $SR_4$ , wherein  $R_4$  is the same as defined before, N( $R_6$ ,  $R_7$ ),  $R_{10}$  is selected from the group consisting of H, optionally substituted  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$  alkoxy,  $C_{1-6}$  alkyl, aryl, heteroaryl except  $W = (CO)$ , Q and P = H;

M = Sulphur is shown by compounds of Formula III



**FORMULA III**

and R<sub>15</sub> is the same as Q defined earlier, comprising converting a compound of Formula VII



FORMULA VII

wherein in U, V, Y, Z, X, W, P, n and M are the same as defined earlier and are R<sub>14</sub> is any group which can be converted to group R<sub>15</sub> in one to five steps.

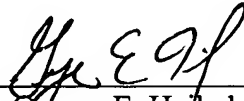
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Applicants have now complied with 37 CFR 1.121 and included the status indicators for each claim. Authorization is hereby given to charge any fees deemed to be due in connection herewith to Deposit Account No. 50-0912.

Respectfully submitted,

MEHTA *et al.*

By: \_\_\_\_\_

  
George E. Herbel  
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Dated: September 22, 2003

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